



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,321	07/23/2001	Kenichi Myokan	0941.65715	3590

7590 05/20/2005

Patrick G. Burns, Esq.
GREER, BURNS & CRAIN, LTD.
Suite 2500
300 South Wacker Dr.
Chicago, IL 60606

EXAMINER

MILLER, BRIAN E

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,321

Applicant(s)

MYOKAN ET AL.

Examiner

Brian E. Miller

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 11-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,6,7,11-13,15,16 and 20-25 is/are allowed.
- 6) ☒ Claim(s) 5, 14, 17-19, 26-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2652

Claims 1-3, 5-7, 11-27 are now pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeshi et al (JP 7-320478). Takeshi et al discloses a disk unit (as shown in at least FIG. 1) including: a disk 1; an actuator (including elements 3, 4, 5) for supporting a head 11 that reads information from or writes information to the disk; and an airflow-regulating member 7 “for receiving and regulating airflow generated by disk rotation so as to prevent the airflow from flowing toward the actuator” (see paragraph [0019-0020]). As depicted in FIG. 1, with the airflow-regulating member 7, airflow (indicated by arrow “B” is prevented from directly contacting the pivot axis 4 and voice coil 5 of the actuator and thus suppressing needless air flow and reducing “windage loss” (see CONSTITUTION). Further, the airflow-regulating member is provided in proximity to, i.e., near, a boundary between a first area where an inner wall of a housing of the disk runs side by side with a peripheral edge of the disk and a second area where a distance between the inner wall and the peripheral edge becomes longer than in the first area (an area adjacent element numerals 12, 16 in FIG. 1); (as per claim 18) wherein said airflow-regulating member is provided in a counter-rotational direction of the disk (see direction “A” in the FIGs.) from the

Art Unit: 2652

actuator; (as per claim 19) wherein said airflow-regulating member is considered to be a “spoiler”.

3. Claims 5, 14, 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Genheimer (US 5,801,899). (As per claims 20 & 21) Genheimer shows in FIGs. 3-5, a disk unit for reading information from or writing information to a disk 18 by means (the transducer) of a head 28 supported by an actuator 20, the disk 18 and the actuator 20 being contained in a housing 10 of the disk unit, the disk unit comprising a shroud (first member) 46 (see col. 5, lines 49-56) having a face perpendicular to a surface of the disk 18 and opposing a peripheral edge of the disk, a “spoiler” (second member) 100b having a given height in a direction perpendicular to the surface of the disk and extending above the surface of the disk from the peripheral edge and generally toward a center of the disk (element 102A in FIG. 3); (as per claims 5 & 14) wherein the shroud 46 and the spoiler 100 are formed integrally with each other (see FIG. 5); Further regarding the length of the “tooth” extending from the upright part toward the center of the disk having a length between 1mm and 25 mm, it is considered to be encompassed by Genheimer. At col. 4, lines 54-61, Genheimer specifically recites that the horizontal arms 102 must extend sufficiently into the stack of discs 18 to constrain vertical deflection of the discs and that they preferably do not extend to the recording surfaces of the discs. As the recording surfaces are *at least* 1 mm inward of the peripheral edge of the disc, it is considered, that Genheimer meets this dimensional limitation.

Allowable Subject Matter

4. Claims 1-3, 6-7, 11-13, 15-16, 20-25 are allowable over the prior art of record. The reasons for allowance were previously provided.

Response to Applicant's Amendment/Arguments

5. Applicant's arguments filed 1/21/05 have been fully considered but they are not persuasive.

A...Applicant asserts, with respect to claim 17, that Takeshi et al does not "prevent air flow from flowing toward the actuator" as required by the claims.

In response, the Examiner disagrees. It is considered that the configuration of Takeshi et al does "prevent" or impede air flow, such that the claims do not encompass complete elimination of the air flow toward the actuator, since in order to do this, a complete enclosure of the actuator would be necessary. Neither the present application nor Takeshi et al would be capable of complete elimination of airflow toward the actuator, thus, as interpreted by the Examiner, the rejection is considered proper and is maintained.

B...Applicant submits that new claims 26, 27 are identical to previously non-amended claims 20, 21. The Examiner thus reapplies the same rejection as previously maintained with respect to Genheimer for these claims. Further, with respect to claims 5 & 14, as shown in FIG. 5, Genheimer also discloses that the shroud and spoiler are formed integrally.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Miller whose telephone number is (703) 272-7578. The examiner can normally be reached on M-TH 7:15am-4:45pm (and every other friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "B. E. Miller", with a stylized flourish at the end.

Brian E. Miller
Primary Examiner
Art Unit 2652

BEM
October 28, 2004